Remarks

The amendment to claim 1 and the rejection under 35 U.S.C. 101

The amendment to claim 1 makes it clear that the claimed graphical user interface is part of a system that is implemented using one or more processors, graphical user interface

5   devices, and memory devices and that input from the graphical user interface affects the behavior of the system of which the graphical user interface is a part. The hardware elements added by the claim are disclosed in FIG. 8, with the graphical user interface devices being browsers connected to Internet 807 or displays on local peripheral devices 808. FIGs. 13-16 disclose a preferred embodiment of the claimed graphical user

10 interface.

As amended, the claim sets forth the physical articles or objects necessary to constitute a machine or manufacture, relates these objects to the graphical user interface, and indicates the effects on the objects of the action specified by the graphical user interface.

15 The system has "at least one memory device", "at least one "device for implementing the graphical user interface", and "at least one processor having access to the memory device and the graphical user interface device" and the claim further sets forth in the preamble that the records with which the graphical user interface is concerned are "stored in the memory device", and that the processor causes "the graphical user interface device to

20 generate the graphical user interface", that the processor "respond[s] to inputs from the graphical user interface", and "automatically execut[es] a predefined query according to a predefined schedule". The body of the claim further sets forth how the user of the graphical user interface may specify a record field whose value is to be modified by an action and the action by which the specified record field is to be modified and then sets

25 forth how the processor responds to the specification of the record field and the action by performing the action on the field "each time the processor automatically executes the predefined query according to the predetermined schedule and the query returns a record that belongs to the set". As the claim is presently amended, there can be no doubt that it is directed to an apparatus and consequently passes muster under 35 U.S.C. 101.

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The rejection of claim 1 as presently amended under 35 U.S.C. 103

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The rejection is based on the combination of Marlin with Akifuji. Applicant's claims are addressed to a "graphical user interface". In the following, Applicant will show that neither of the references discloses anything about a graphical user interface as that term is used in Applicant's specification and claims, and that the combination of references

5   consequently cannot render Applicant's claims obvious.

Graphical user interfaces generally

Wikipedia provides a definition of "graphical user interface" that is useful in the present context:

10   A **graphical user interface (GUI)** allows for interaction with a computer
             or other media formats which employs graphical images, widgets, along
             with text to represent the information and actions available to a user. The
             actions are usually performed through direct manipulation of the graphical
             elements.

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A graphical user interface is exactly what the term itself implies: it has a display upon which graphical elements are displayed and a pointing device that permits the user to manipulate the graphical elements. In manipulating the graphical elements, the user is interacting with the system that is providing the graphical user interface. The graphical

20   user interface is thus apparatus for controlling the system that is providing the graphical user interface. As such, a given graphical user interface may be distinguished from other graphical user interfaces by what the graphical elements look like, how the graphical elements may be manipulated, or by the effect of a manipulation of the graphical user interface on the system the user is interfacing with. If the combination of a manipulation

25   of the graphical user interface with the effect of the manipulation on the system is novel and non-obvious, there is nothing in the patent law which prevents one from getting a patent on the graphical user interface on the basis of the manipulation and its effect.

"Graphical user interface" in Applicant's specification

30   As may be seen from the screen shots of FIGs. 13-16 and their descriptions beginning at page 48 of Applicant's Specification, a graphical user interface in Applicant's specification is a display in a display device such as a terminal which can be manipulated

by input devices such as a pointing device and/or a keyboard to control a computer-implemented system.

"Graphical user interface" in claim 1

5   It is apparent from the description of the graphical user interface in claim 1 as currently amended that the claimed graphical user interface is a graphical user interface of the type shown in FIGs. 13-16 of the Specification. What is specifically being claimed is a graphical user interface that includes "a window in the graphical user interface device" that " display[s] a table wherein the record field whose value is to be modified by the

10   action has an entry that is selectable by a user of the graphical user interface" and in which the entry includes "a first field of the entry that identifies the record field to be modified by the action; and one or more action fields of the entry that, when the user has selected the entry, the user may set to specify the predefined action". The manipulations which the user may perform on the GUI are selecting an entry and specifying action

15   fields, and when that is done,

> each time the processor automatically executes the predefined query according to the predefined schedule and the predefined query returns a record that belongs to the set, the processor modifies the value in the record field in the returned record that is identified by the entry's first field

20   as specified in the one or more action fields of the entry.

A combination of references which renders claim 1 obvious must therefore disclose a window containing the table, a selectable entry for the record field in the table, a field in the entry that identifies the record field and one or more fields in the entry that are

25   settable by the user to specify the predefined action. Further, the *result* of selecting the entry for a record field and specifying the predefined action must be as set forth at lines 23-27 of the claim.

Disclosure of graphical user interfaces in the references

30   An idea of the difficulties involved in applying Marlin and Akifuji to Applicant's claim 1 can be seen in the fact that neither reference contains any figures made from screen shots., i.e., any disclosure of the graphical component of their graphical user interfaces.

Marlin

The main discussion of the GUI in Marlin is at column 14, lines 15-49. As is apparent from that discussion, what Marlin's GUI is a display system which is "particular to the DMI [standard] and is useful only in that environment, but it will display objects from the

5   database [made from the MIF files prescribed by the DMI standard] regardless of what their content is". The GUI uses the arrangements provided by the Windows operating system. Marlin terms what is displayed in the GUI a "report". Reports have a table format (col. 14, lines 28-41). What appears in a report is determined by a "report definition" which defines what data from the database is to be displayed in the rows and

10   columns of the report. A table driven interface defines the reports (col. 15, lines 8-9).

There is no further disclosure of that interface. The flowcharts of FIGs. 9-14 disclose how reports are displayed and generated. They do not, however, disclose anything about how they look and behave beyond the fact that reports have a table format and that they

15   can be used to read and set values in the database (col. 16, 44-50). How a table looks and behaves depends of course on its report definition, and there is no disclosure of a report that produces anything like the table, entries for records, and fields in the entry that indicate the record and the action to be performed on it of Applicant's GUI and no disclosure of anything like the manner in which the system to which Applicant's GUI

20   belongs responds to the specification of a record field and action. In referring to Akifuji for the disclosure of the structure of the entries in the table in Applicant's GUI, Examiner himself admits that Marlin does not disclose the table, entries in the table, or fields in the entry of Applicant's GUI.

25   Akifuji

The only mention of graphical user interfaces or GUIs in Akifuji is the following from col. 1, lines 24-29:

> Generally, a workflow control system creates a business flow (workflow)
> specifying a business procedure by using a graphical user interface
30   > including icons and arrows, a workflow engine, i.e., a program, interprets
> the business flow and instruct the user to process the electronic
> documents.

Akifuji's workflow system includes a number of tables (see 80, 10, 20, and 30 in FIG. 15) and details of certain of these tables are presented in FIGs. 2, 3, 4, and 5. Resource selection rules 15010 and business process flow definition 15000 may or may not be implemented as tables; as described, they appear to be collections of code. See for

5   example col. 10, lines 27-36. There is simply no disclosure whatever in Akifuji of a graphical user interface for doing anything with the tables, nor is there any disclosure of behavior in Akifuji's workflow system which in any way resembles the behavior of the system in which Applicant's graphical user interface is used.

10   The foregoing analysis is confirmed by a look at the locations in Akifuji which Examiner cites in his rejection of claim 1. The first location, col. 4, lines 52-57 describes action/division table 20, which is simply a table in the workflow system, not part of a GUI, as required by Applicant's claim. The second location, col. 6, lines 59-65, merely states that because Akifuji's workflow system works in response to changes in application

15   database 80, it can be implemented without modification of the application program that uses database 80.

Examiner's failure to make a prima facie case of obviousness

In order to reject a claim under 35 U.S.C. 103, Examiner must make a *prima facie* case of

20   obviousness. One requirement of the *prima facie* case is that the references which are combined to make the rejection must show all of the limitations of the claim under rejection. As set forth above, Marlin discloses at most a GUI that uses a table in a display to manipulate data in a database; Akifuji contains substantially no disclosure about GUIs and consequently can add nothing to Marlin. In particular, though the combination of

25   references may disclose a window containing a table, neither reference discloses a selectable entry for the record field in the table, a field in the entry that identifies the record field and one or more fields in the entry that are settable by the user to specify the predefined action. Further, neither reference discloses anything like the *result* of selecting the entry for a record field and specifying the predefined action that is set forth

30   at lines 23-27 of the claim.

Because that is so, the combined references do not show all of the limitations of Applicant's claim 1 and cannot provide the basis for a rejection of that claim under 35 U.S.C. 103.

5   *The dependent claims*

The dependent claims are of course patentable because claim 1 is patentable, but the complete failure of the references to disclose anything resembling the graphical user interface of claim 1 means that the further details of the graphical user interface set forth in the dependent claims are also not disclosed in the references, and the dependent claims

10   are patentable in their own rights over the references.

In particular, claims 2 and 3 are addressed to the relationship between the type of the record the table entry belongs to and the kinds of action fields in the table entry. Since neither reference shows anything like Applicants' table with entries for records and fields

15   in the entry that identify the record and that may be set to specify the action, claims 2 and 3 are patentable over the references.

Claims 4-16 and 18-19 are addressed to details of the manner in which the system to which Applicant's graphical user interface belongs responds to the graphical user

20   interface. What is set forth in claim 1 is not simply setting values in fields of records in databases, but rather an interface which specifies a record field and an action to be performed on it

each time the processor automatically executes the predefined query according to the predefined schedule and the predefined query returns a
25   record that belongs to the set, the processor modifies the value in the record field in the returned record that is identified by the entry's first field as specified in the one or more action fields of the entry.

The references do not describe any response to their graphical user interfaces which in

30   any way resembles the foregoing; thus the further details concerning the foregoing that are set forth in claims 4-16 render these claims, too, patentable in their own rights over the references.

Conclusion

Applicant has corrected the spelling errors in claims 9 and 16, has amended his claim 1 to overcome Examiner's rejection of the claim under 35 U.S.C. 101, and has demonstrated that his amendments are fully supported by the application as originally filed. Applicant

5   has further shown that Examiner has not made his *prima facie* case of obviousness with regard to claim 1 or the dependent claims and that Applicant's claims are consequently patentable over the references. Applicant has thus been completely responsive to Examiner's Office action of 11/14/2006 and has thereby satisfied the requirements of 37 C.F.R. 1.111(b). That being the case, Applicant respectfully requests that Examiner

10   continue with the examination and allow the claims as amended, as provided by 37 C.F.R. 1.111(a). A petition for a 1-month extension of time and the requisite fee accompany this response. No other fees are believed to be required; should any be, please charge them to deposit account 501315; any overpayments should be credited to that account.

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